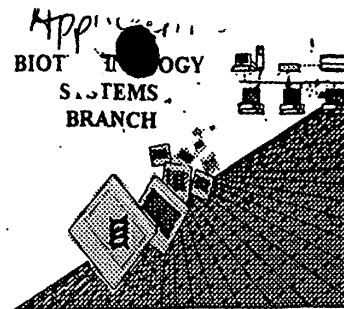
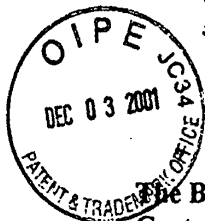


**RAW SEQUENCE LISTING
ERROR REPORT**



#12

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer-readable form:

Application Serial Number: US 09/479,608

Source: OIPE

Date Processed by STIC: 08 09 2001

RECEIVED
DEC 06 2001
TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212. *

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/479608

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOF

- 1 Wrapped Nucleics
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length
Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ✓ Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.



OIPE

SEQUENCE LISTING
PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001
TIME: 13:18:12

Input Set : A:\35918.txt
Output Set: N:\CRF3\08092001\I479608.raw

RECEIVED
DEC 06 2001
TECH CENTER 1600/2900

Does Not Comply
Corrected Diskette Needed

5 <110> APPLICANT: Drmanac, R.
6 Drmanac, S.
7 Kita, D.
8 Cooke, C.
9 Xu, C.
11 <120> TITLE OF INVENTION: ENHANCED SEQUENCING BY HYBRIDIZATION USING POOLS OF PROBES
13 <130> FILE REFERENCE: 28110/35918
15 <140> CURRENT APPLICATION NUMBER: US 09/479,608
16 <141> CURRENT FILING DATE: 2000-01-06
18 <150> PRIOR APPLICATION NUMBER: US 60/115,284
19 <151> PRIOR FILING DATE: 1999-01-06
21 <160> NUMBER OF SEQ ID NOS: 71
23 <170> SOFTWARE: PatentIn version 3.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 10
27 <212> TYPE: DNA
28 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: *Description required in field 223*
33 <400> SEQUENCE: 1
34 aaaaaaaaaa 10
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 10
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: *Description of artificial sequence required*
45 <400> SEQUENCE: 2
46 acacacacac 10
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 20
50 <212> TYPE: DNA
51 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: *description of artificial sequence required*
56 <400> SEQUENCE: 3
57 atctgtgtct gaagtagtcc 20
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 20
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: *description of artificial sequence required*
67 <400> SEQUENCE: 4
68 atctctggct gaagtagtcc 20
70 <210> SEQ ID NO: 5
71 <211> LENGTH: 43

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001
 TIME: 13:18:12

Input Set : A:\35918.txt
 Output Set: N:\CRF3\08092001\I479608.raw

72 <212> TYPE: DNA
 73 <213> ORGANISM: Artificial Sequence
 75 <220> FEATURE:
 76 <221> NAME/KEY: misc_feature
 77 <222> LOCATION:
 78 <223> OTHER INFORMATION: b = C or G or T *OK*
 80 <400> SEQUENCE: 5
 81 bbbbbbattt cbbbbbgcac tbbbbgtttg bbbacacgbb bbb
 83 <210> SEQ ID NO: 6
 84 <211> LENGTH: 43
 85 <212> TYPE: DNA
 86 <213> ORGANISM: Artificial Sequence — *Field 223 with description of artificial sequence required*
 88 <220> FEATURE:
 89 <221> NAME/KEY: misc_feature
 90 <222> LOCATION:
 91 <223> OTHER INFORMATION: b = C or G or T
 93 <400> SEQUENCE: 6
 94 bbbbbbattt gbbbacactb bbbgtttcbb bbbgcacgbb bbb
 96 <210> SEQ ID NO: 7
 97 <211> LENGTH: 10
 98 <212> TYPE: DNA
 99 <213> ORGANISM: Artificial Sequence
 101 <220> FEATURE:
 102 <223> OTHER INFORMATION:
 104 <400> SEQUENCE: 7
 105 ggtctcccca
 107 <210> SEQ ID NO: 8
 108 <211> LENGTH: 10
 109 <212> TYPE: DNA
 110 <213> ORGANISM: Artificial Sequence
 112 <220> FEATURE:
 113 <223> OTHER INFORMATION:
 115 <400> SEQUENCE: 8
 116 gtctcccaa
 118 <210> SEQ ID NO: 9
 119 <211> LENGTH: 10
 120 <212> TYPE: DNA
 121 <213> ORGANISM: Artificial Sequence
 124 <220> FEATURE:
 125 <223> OTHER INFORMATION:
 127 <400> SEQUENCE: 9
 128 tctcccaag
 130 <210> SEQ ID NO: 10
 131 <211> LENGTH: 10
 132 <212> TYPE: DNA
 133 <213> ORGANISM: Artificial Sequence
 135 <220> FEATURE:
 136 <223> OTHER INFORMATION:
 138 <400> SEQUENCE: 10

43

10

10

10

RAW SEQUENCE LISTING

DATE: 08/09/2001

PATENT APPLICATION: US/09/479,608

TIME: 13:18:12

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw

139 ctccccaagg 10

141 <210> SEQ ID NO: 11

142 <211> LENGTH: 10

143 <212> TYPE: DNA

144 <213> ORGANISM: Artificial Sequence

146 <220> FEATURE:

147 <223> OTHER INFORMATION:

149 <400> SEQUENCE: 11

150 tccccaaggc 10

152 <210> SEQ ID NO: 12

153 <211> LENGTH: 10

154 <212> TYPE: DNA

155 <213> ORGANISM: Artificial Sequence

157 <220> FEATURE:

158 <223> OTHER INFORMATION:

160 <400> SEQUENCE: 12

161 cccaaggcg 10

163 <210> SEQ ID NO: 13

164 <211> LENGTH: 10

165 <212> TYPE: DNA

166 <213> ORGANISM: Artificial Sequence

168 <220> FEATURE:

169 <223> OTHER INFORMATION:

171 <400> SEQUENCE: 13

172 cccaaggcgc 10

174 <210> SEQ ID NO: 14

175 <211> LENGTH: 10

176 <212> TYPE: DNA

177 <213> ORGANISM: Artificial Sequence

179 <220> FEATURE:

180 <223> OTHER INFORMATION:

182 <400> SEQUENCE: 14

183 ccaaggcgca 10

185 <210> SEQ ID NO: 15

186 <211> LENGTH: 10

187 <212> TYPE: DNA

188 <213> ORGANISM: Artificial Sequence

190 <220> FEATURE:

191 <223> OTHER INFORMATION:

193 <400> SEQUENCE: 15

194 caaggcgcac 10

197 <210> SEQ ID NO: 16

198 <211> LENGTH: 30

199 <212> TYPE: DNA

200 <213> ORGANISM: Artificial sequence

202 <220> FEATURE:

203 <223> OTHER INFORMATION:

205 <400> SEQUENCE: 16

206 tgcttgccac aggtctcccc aaggcgcaact 30

Field 223 description required

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001
TIME: 13:18:12

Input Set : A:\35918.txt
Output Set: N:\CRF3\08092001\I479608.raw

209 <210> SEQ ID NO: 17
210 <211> LENGTH: 10
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION:
217 <400> SEQUENCE: 17
218 aggtctcccc 10
221 <210> SEQ ID NO: 18
222 <211> LENGTH: 10
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION:
229 <400> SEQUENCE: 18
230 ggtctcccca 10
233 <210> SEQ ID NO: 19
234 <211> LENGTH: 10
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION:
241 <400> SEQUENCE: 19
242 gtctccccaa 10
244 <210> SEQ ID NO: 20
245 <211> LENGTH: 10
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION:
252 <400> SEQUENCE: 20
253 tctccccaag 10
255 <210> SEQ ID NO: 21
256 <211> LENGTH: 10
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION:
263 <400> SEQUENCE: 21
264 ctccccaagg 10
266 <210> SEQ ID NO: 22
267 <211> LENGTH: 10
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION:
274 <400> SEQUENCE: 22
275 tccccaaggc 10
277 <210> SEQ ID NO: 23

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001

TIME: 13:18:12

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw

278 <211> LENGTH: 10
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION:
285 <400> SEQUENCE: 23
286 ccccaaggcg 10
288 <210> SEQ ID NO: 24
289 <211> LENGTH: 10
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION:
296 <400> SEQUENCE: 24
297 cccaaggcgc 10
299 <210> SEQ ID NO: 25
300 <211> LENGTH: 10
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequences
304 <220> FEATURE:
305 <223> OTHER INFORMATION:
308 <400> SEQUENCE: 25
309 ccaaggcgca 10
311 <210> SEQ ID NO: 26
312 <211> LENGTH: 10
313 <212> TYPE: DNA
314 <213> ORGANISM: Artificial Sequence
316 <220> FEATURE:
317 <223> OTHER INFORMATION:
319 <400> SEQUENCE: 26
320 caaggcgcac 10
322 <210> SEQ ID NO: 27
323 <211> LENGTH: 10
324 <212> TYPE: DNA
325 <213> ORGANISM: Artificial Sequence
327 <220> FEATURE:
328 <223> OTHER INFORMATION:
330 <400> SEQUENCE: 27
331 caggtctccc 10
333 <210> SEQ ID NO: 28
334 <211> LENGTH: 10
335 <212> TYPE: DNA
336 <213> ORGANISM: Artificial Sequences
338 <220> FEATURE:
339 <223> OTHER INFORMATION:
341 <400> SEQUENCE: 28
342 gcttgccaca 10
344 <210> SEQ ID NO: 29
345 <211> LENGTH: 10

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/479,608

DATE: 08/09/2001

TIME: 13:18:13

Input Set : A:\35918.txt

Output Set: N:\CRF3\08092001\I479608.raw